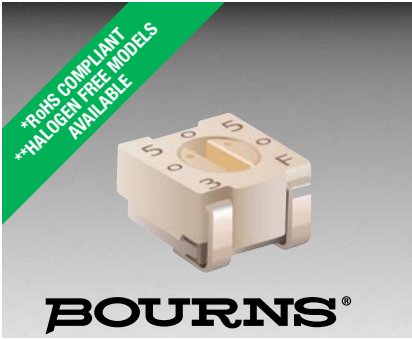




THE DATASHEET OF
3313S-1-102E





Features

- Surface Mount 3 mm Square Single-Turn Cermet / Sealed
- Compatible with surface mount manufacturing processes (not recommended for wave soldering)
- Rotor stop for "in-circuit" adjustment
- 100 cycle rotational and seal life
- Plastic housing for RF applications
- Reverse pin layout option (Model 3313X)
- RoHS compliant*
- Halogen free models available
- AEC-Q200 Qualified Grade 1

3313 - 3 mm TrimPot® Trimming Potentiometer

Electrical Characteristics

Standard Resistance Range 10 ohms to 2 megohms (see standard resistance table)
 Resistance Tolerance ±20 % std.
 End Resistance 1 % or 3 ohms max. (whichever is greater)
 Contact Resistance Variation 3 % or 3 ohms
 Adjustability
 Voltage Divider ±0.1 %
 Rheostat ±0.2 %
 Resolution Infinite
 Insulation Resistance 500 vdc. 100 megohms min.
 Dielectric Strength
 Sea Level 500 vac
 70,000 Feet 350 vac
 Adjustment Angle 220° nom.

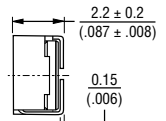
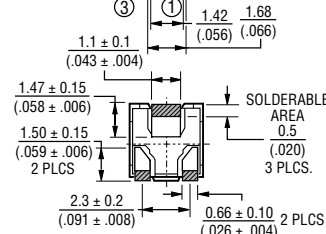
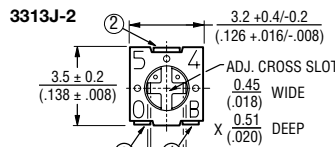
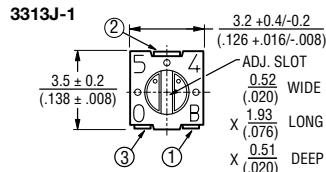
Environmental Characteristics

Max. Soldering Exposure 250 °C/10 seconds
 Power Rating (200 volts max.)
 70 °C 0.125 watt
 125 °C 0 watt
 Operating Temp. Range -55 °C to +125 °C
 Temperature Coefficient
 ≤100 ohms ±150 ppm/°C;
 >100 ohms ±100 ppm/°C
 Seal Test .. 85 °C Fluorinert[†]/60 seconds
 Humidity MIL-STD 202, Method 106 (no vibration) TRS ±3 %; IR 10 megohms
 Vibration 20 G TRS ±1 %; VRS ±1 %
 Shock 100 G TRS ±1 %; VRS ±1 %
 Load Life 1000 hours @ 70 °C Rated Power; TRS ±3 %
 Rotational Life 100 cycles TRS ±3 %
 Thermal Shock 5 cycles TRS ±2 %; VRS ±1 %

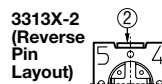
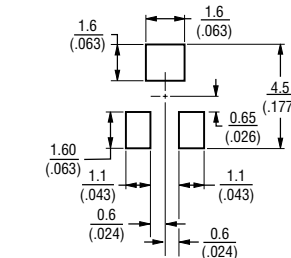
Physical Characteristics

Mechanical Angle 250 ° nom.
 Torque 50 g-cm max.
 Stop Strength 200 g-cm min.
 Pushover Strength ("S" Style only) 1.6 Kilograms (3.5 lbs) minimum
 Flammability U.L. 94V-0
 Weight Approx. 0.01 oz.
 Marking Resistance code and date code
 Wiper 50 % (Actual TR) ±10 %
 Standard Packaging
 J, X Styles (MSL-1) 1000 pcs./7 " reel
 S Style (MSL-1) 200 pcs./7 " reel
 Adjustment Tool H-91

Product Dimensions

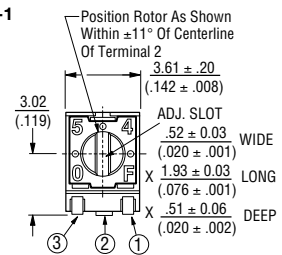


RECOMMENDED LAND PATTERN

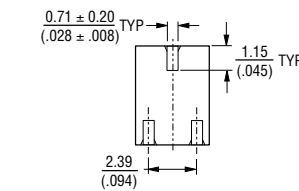
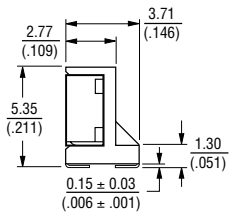
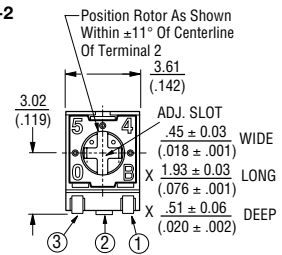


DIMENSIONS: MM (INCHES)
 TOLERANCES: ± 0.25 (0.010) EXCEPT WHERE NOTED

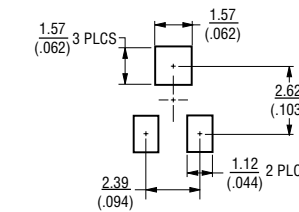
3313S-1



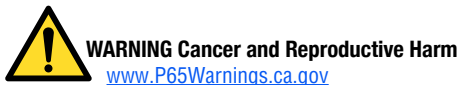
3313S-2



RECOMMENDED LAND PATTERN



* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 ** Halogen free product is identified by a black housing color. Bourns follows the prevailing definition of "halogen free" in the industry. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
 † "Fluorinert" is a registered trademark of 3M Co.
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Features (Continued)

- See [processing information](#) on RoHS compliant surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)

3313 - 3 mm Trimpot® Trimming Potentiometer

BOURNS®

Standard Resistance Table

| Resistance (Ohms) | Part Marking Code | Resistance Code |
|-------------------|-------------------|-----------------|
| 10 | A1 | 100 |
| 20 | 21 | 200 |
| 50 | 51 | 500 |
| 100 | A2 | 101 |
| 200 | 22 | 201 |
| 500 | 52 | 501 |
| 1,000 | A3 | 102 |
| 2,000 | 23 | 202 |
| 5,000 | 53 | 502 |
| 10,000 | A4 | 103 |
| 20,000 | 24 | 203 |
| 50,000 | 54 | 503 |
| 100,000 | A5 | 104 |
| 200,000 | 25 | 204 |
| 500,000 | 55 | 504 |
| 1,000,000 | A6 | 105 |
| 2,000,000 | 26 | 205 |

Popular distribution resistance values listed in boldface. Special resistances available.

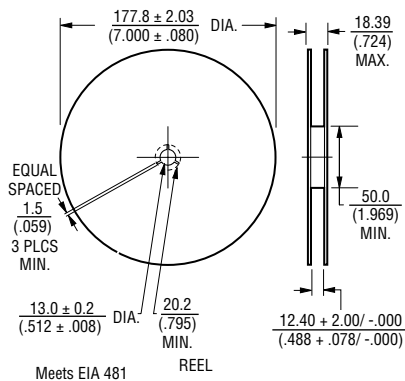
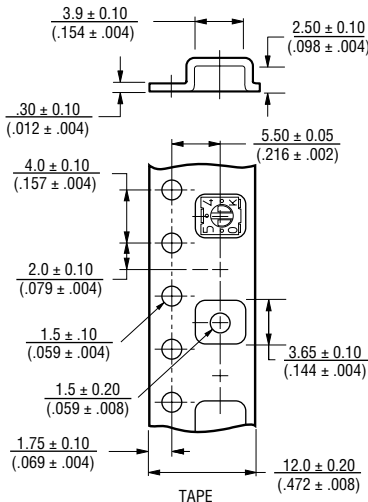
How To Order

3313 J - 1 - 502 E

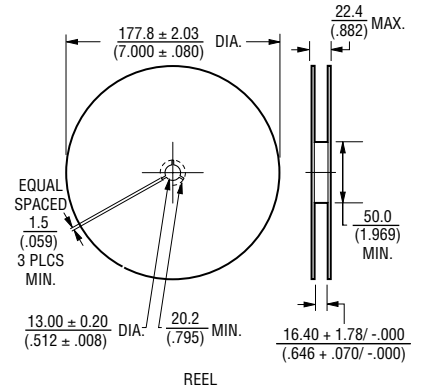
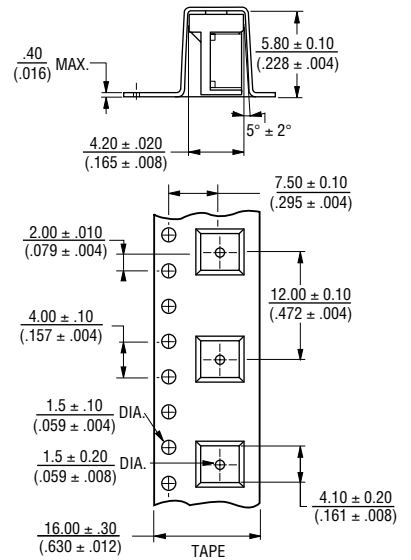
Model _____
 Style _____
 Standard or Modified Product Indicator _____
 -1 = Standard Single Slot
 -2 = Standard Cross Slot
 -GK2 = Halogen Free Single Slot (Black Housing Color)
 -GL5 = Halogen Free Cross Slot (Black Housing Color)
 Resistance Code _____
 Embossed Tape _____
 1000 pcs. / 7" Reel (J, X Styles - MSL-1)
 200 pcs. / 7" Reel (S Style - MSL-1)

Tape and reel material meets Antistatic ANSI/ESD 5541-2003 packaging standards.

3313J, X Packaging Specifications



3313S Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCES: $\pm \frac{0.25}{(.010)}$ EXCEPT WHERE NOTED

REV. 07/19

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Users should verify actual device performance in their specific applications.

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